

REMARKS

This application has been carefully reviewed in light of the Office Action dated October 16, 2003. Claims 1-6 remain pending in this application. Claim 1 is the independent claim. Favorable reconsideration is respectfully requested.

On the merits, the Office Action rejected Claim 1 under 25 U.S.C. § 112, second paragraph for failing to provide antecedent basis. Applicants respectfully believe the amendments to Claim 1 adequately respond to the rejection and respectfully request its withdrawal.

Further on the merits, the Office Action rejected Claims 1-2 and 6 under 35 USC § 103(a) as being unpatentable over Nguyen et al. (U.S. Patent No. 5,665,620; hereinafter "Nguyen") in view of Wang et al. (U.S. Patent No. 4,376,627; hereinafter "Wang"). The Office Action also rejected Claims 3-5 under 35 U.S.C. § 103(a) as being unpatentable over Nguyen in view of Wang and further in view of Shin et al. (U.S. Patent No. 6,180,457; hereinafter "Shin"). Applicants respectfully submit that the pending application and claims are patentable for at least the following reasons.

Applicant's Claim 1 recites: "A method of forming a semiconductor structure comprising a substrate having a patterned ONO insulating layer over a portion thereof, and characterized by

the steps of forming an insulating layer comprising an Oxide-Nitride-Silicon layered structure on the substrate, applying a photoresist to a silicon surface as part of a patterning process and stripping the photoresist once a required patterning step has been completed, and subsequently re-oxidizing the silicon layer of the remaining Oxide-Nitride-Silicon structure so as to form an ONO insulating layer structure."

As stated in the Office Action, Nguyen fails to recite or suggest applying a photoresist to the silicon surface as part of a patterning process and stripping the photoresist once a required patterning process has been completed.

Wang recites applying a photoresist and etching. However, Nguyen and Wang cannot be properly combined. M.P.E.P. § 706.02(j) states:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaack*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Applicant respectfully believes that Wang fails to provide suggestion to modify Nguyen's device structure to include a layer

of photoresist which is subsequently etched using the silicon layer to protect the oxide. As stated in the Office Action, "It would have been obvious... to combine the teachings of Nguyen and Wang to apply a photoresist to a silicon layer during etching process to protect it (the silicon layer) from damage." However, as stated in Applicants' specification on Page 4, paragraph 1: "there is no exposed oxide to be attacked during the stripping of the photoresist." Nguyen is not concerned with the status of its silicon layer and whether it is damaged from stripping at all. Since Wang only recites using a layer of photoresist which is subsequently etched, it does not provide the motivation to have a silicon layer between the photoresist and the nitride layer which is re-oxidized after stripping. One of ordinary skill at the time of the invention would not have the proper motivation to combine the references. Contrary to the Office Action's assertion, it is not the silicon layer that is protected from damage, but rather, the later formed oxide layer. Applicants respectfully traverse the rejection over Nguyen in view of Wang for at least these reasons.

Claims 2-6 depend from independent Claim 1 discussed above and are believed patentable for at least the same reasons. In addition, however, they are also deemed to define an additional aspect of the invention, and should be individually considered on its own merits. Further, Applicants respectfully believe that the

§ 103 rejection of Claims 3-5 to be moot in light of the above remarks and requests their withdrawal.

In view of the foregoing amendments and remarks, Applicants respectfully submits that the currently-pending claims are clearly patentably distinguishable over the cited and applied references. Accordingly, entry of this amendment, reconsideration of the rejections of the claims over the references cited, and allowance of this application is earnestly solicited.

Respectfully submitted,

By 

Aaron Waxler,

Reg. No. 48,027

Attorney

(914) 333-9608

January 12, 2004

Appl. No. 09/989,250  
Amdt. dated July 6, 2004  
Supplemental Amendment

**REMARKS/ARGUMENTS**

Applicants have resubmitted a copy of the response to the Office Action of 16-OCT-2003. This response was filed timely on 13-JAN-2004. Enclosed with the response is the FAX response sheet indicating that the Patent Office timely received this amendment.

Applicants request review and consideration of this amendment and assert that the claims are allowable over the cited references. Applicants respectfully request that a Notice of Allowance be issued in this case.

Please charge any fees other than the issue fee and credit any overpayments to Deposit Account 14-1270.

Respectfully submitted,

Date: 06-JUL-2004

By Peter Zawilski  
Peter Zawilski  
Registration No. 43,305  
(408) 474-9063

Correspondence Address:

Intellectual Property & Standards  
Philips Electronics North America Corporation  
1109 McKay Drive; Mail Stop SJ41  
San Jose, CA 95131 USA

CUSTOMER NUMBER: 24738